

What is claimed is:

- 1 1. A computer diagnostic system, comprising:
  - 2 a computer with a communication port;
  - 3 an I/O system that enables communication via the communication port
  - 4 during power up self test (POST) of the computer; and
  - 5 a handheld device with a communication port configured to
  - 6 communicate with the computer via the computer communication port, the
  - 7 handheld device interfacing with the computer during POST.
- 1 2. The computer diagnostic system of claim 1, the I/O system comprising:
  - 2 a system ROM including I/O code to enable communications with the
  - 3 handheld device when executed; and
  - 4 a processor that executes the I/O code during POST upon power up of
  - 5 the computer.
- 1 3. The computer diagnostic system of claim 2, the I/O code enabling the
- 2 handheld device to emulate at least one I/O device.
- 1 4. The computer diagnostic system of claim 3, the at least one I/O device
- 2 including any one or more of a keyboard, a mouse, a disk drive and a monitor.
- 1 5. The computer diagnostic system of claim 1, further comprising:
  - 2 the communication port of the computer comprising a serial port;
  - 3 the handheld device communication port comprising a serial port; and
  - 4 a serial cable coupled between the serial ports of the handheld device and
  - 5 the computer.

1       6. The computer diagnostic system of claim 1, further comprising:  
2              the computer communication port comprising an infrared transceiver;  
3              the handheld communication port comprising an infrared transceiver;  
4              an I/O bus;  
5              a microcontroller coupled to the I/O bus and the computer infrared  
6              transceiver; and  
7              a memory coupled to the microcontroller.

1       7. The computer diagnostic system of claim 6, further comprising:  
2              the microcontroller, the computer infrared transceiver and the memory  
3              receiving auxiliary power that provides power when the computer is powered  
4              down; and  
5              the handheld device retrieving information from the memory while the  
6              computer is powered down.

1       8. A system comprising:  
2              a storage to store code for performing power up initialization of the  
3              system;  
4              an interface to communicate with a handheld computing device; and  
5              a processor, the code executable on the processor to communicate with  
6              the handheld computing device through the interface during power up  
7              initialization of the system.

1       9. The system of claim 8, wherein the code is executable by the processor  
2              to enable the system to send commands to the handheld computing device and to  
3              receive commands from the handheld computing device through the interface  
4              during power up initialization of the system.

1    10.    The system of claim 9, wherein the code is executable by the processor  
2    to send commands to the handheld computing device to perform at least one of  
3    storing data and displaying information on the handheld computing device  
4    during power up initialization of the system.

1    11.    The system of claim 8, further comprising a disk drive and a video  
2    device, wherein the code is executable by the processor to initialize operations of  
3    the disk drive and the video drive.

1    12.    The system of claim 8, wherein the code is executable by the processor  
2    to receive commands from the handheld computing device during power up  
3    initialization of the system.

1    13.    The system of claim 8, wherein the code is executable by the processor  
2    to enable performance of at least one of the following functions by the handheld  
3    computing device during power up initialization of the system: keyboard  
4    functions, mouse functions, video functions, and disk drive functions.

1    14.    The system of claim 13, wherein the code is executable by the processor  
2    to output data through the interface to the handheld computing device for display  
3    by the handheld computing device during power up initialization of the system.

1    15.    The system of claim 8, wherein the code is executable by the processor  
2    to enable the handheld computing device to emulate input/output functions of  
3    the system during power up initialization of the system.

1    16.    The system of claim 8, wherein the code is executable by the processor  
2    to receive diagnostic commands through the interface from the handheld

3 computing device to perform diagnostics of the system during power up  
4 initialization of the system.

1 17. The system of claim 8, wherein the code comprises BIOS code, and  
2 wherein the code is executable to enable the handheld computing device to  
3 update the BIOS code during power up initialization of the system.

1 18. The system of claim 17, wherein the storage comprises system memory,  
2 the system further comprising non-volatile memory to store the BIOS code, the  
3 BIOS code to be loaded from the non-volatile memory to system memory for  
4 execution by the processor.

1 19. The system of claim 18, wherein the BIOS code in the non-volatile  
2 memory is updated by the handheld computing device.

1 20. A handheld device comprising:  
2 a processor; and  
3 an interface to communicate with a computer having code to perform  
4 power up initialization of the computer,  
5 the processor to interact with the code in the computer to perform tasks  
6 in the computer during power up initialization of the computer.

1 21. The handheld device of claim 20, the processor to emulate input/output  
2 functions of the computer during power up initialization of the computer.

1 22. The handheld device of claim 20, the processor to emulate at least one of  
2 the following functions during power up initialization of the computer: mouse  
3 functions, keyboard functions, storage functions, and display functions.

- 1    23.    A method executable in a system, comprising:
  - 2        storing code to perform power up initialization of the system; and
  - 3        executing the code to communicate with a handheld computing device
  - 4        through an interface of the system during power up initialization of the system.
- 1    24.    The method of claim 23, further comprising receiving commands from  
2        the handheld computing device during power up initialization of the system.
- 1    25.    The method of claim 23, further comprising enabling performance of at  
2        least one of the following functions by the handheld computing device during  
3        power up initialization of the system: keyboard functions, mouse functions,  
4        video functions, and disk drive functions.
- 1    26.    The method of claim 23, further comprising enabling the handheld  
2        computing device to emulate input/output functions of the system during power  
3        up initialization of the system.
- 1    27.    The method of claim 23, further comprising receiving diagnostic  
2        commands through the interface from the handheld computing device to perform  
3        diagnostics of the system during power up initialization of the system.
- 1    28.    The method of claim 23, further comprising updating the code under  
2        command of the handheld computing device.
- 1    29.    The method of claim 28, wherein updating the code under command of  
2        the handheld computing device comprises updating BIOS code under command  
3        of the handheld computing device.

- 1      30.     The method of claim 23, further comprising sending information to the
- 2     handheld computing device through the interface for display by the handheld
- 3     computing device during power up initialization of the system.